Session 3

Fruit spirits

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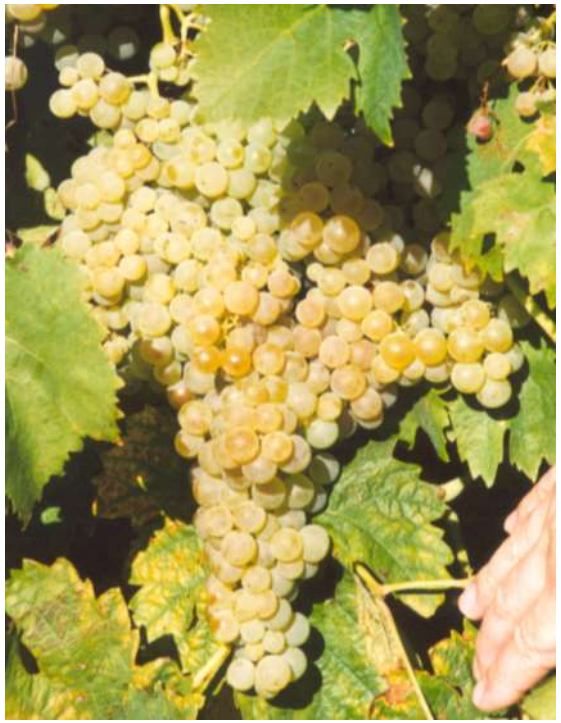
Raw material



Fruits

- grapes, apples, pears
  - fresh fruit used to avoid spoilage
  - fruit juice can easily be extracted and fermented

Pomace

- grape pomace
  - leftover grape skins

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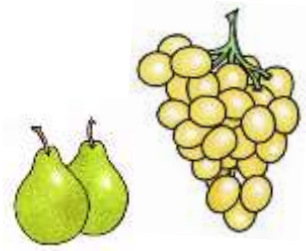
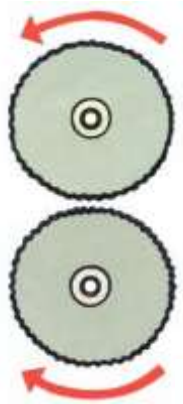
Fruit spirits basics

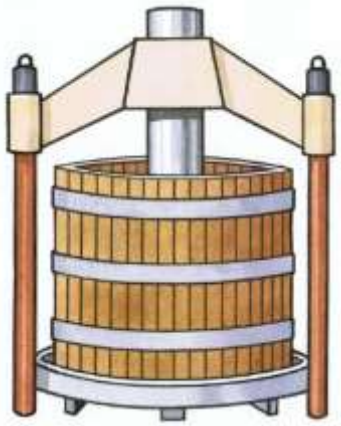
processing fresh fruit & fermentation

freshly picked fruit



crush





press

white grape pomace

❶ ❷

fruit juice

add yeast

alcoholic liquid

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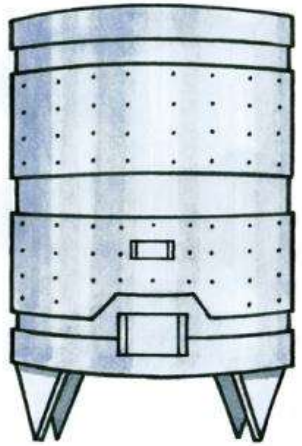
Fruit spirits basics

distillation & post-distillation

❸ ❹



pot stills or column stills

oak vessels or inert vessels

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Post-distillation operations

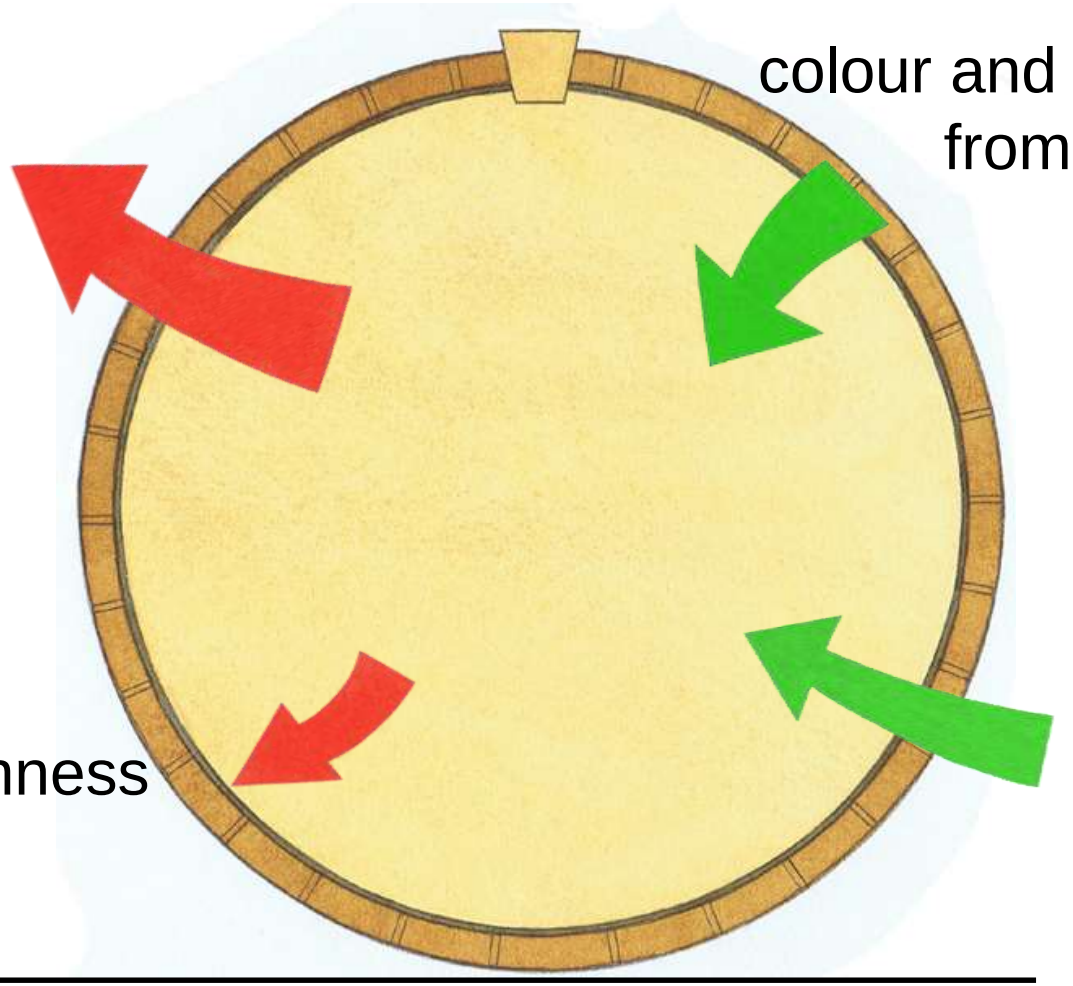
oak barrels

Post-distillation operations

fundamentals of oak maturation

evaporation and concentration

colour and flavours from the oak



removes harshness

oxygen and time

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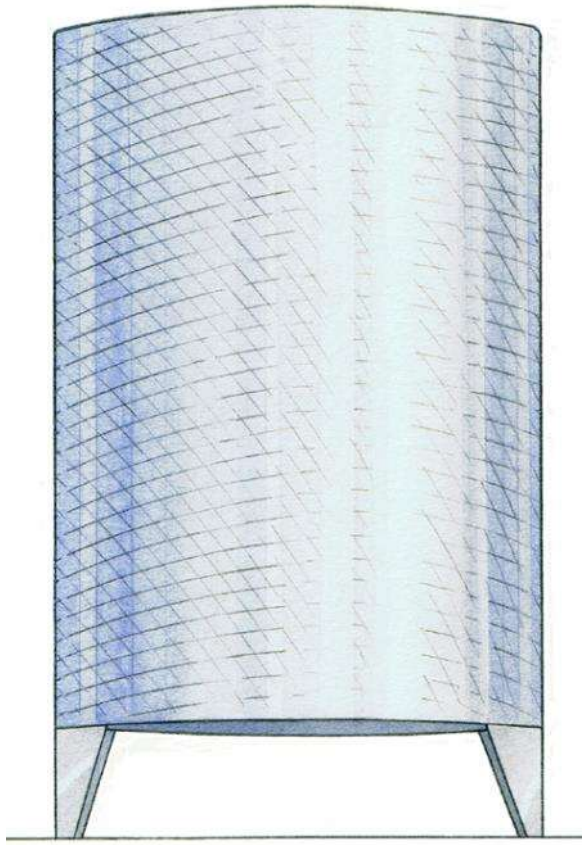
Post-distillation operations

inert vessels

Using inert vessels

- storage
- maturation
- preservation



stainless steel vessel

glass demijohn

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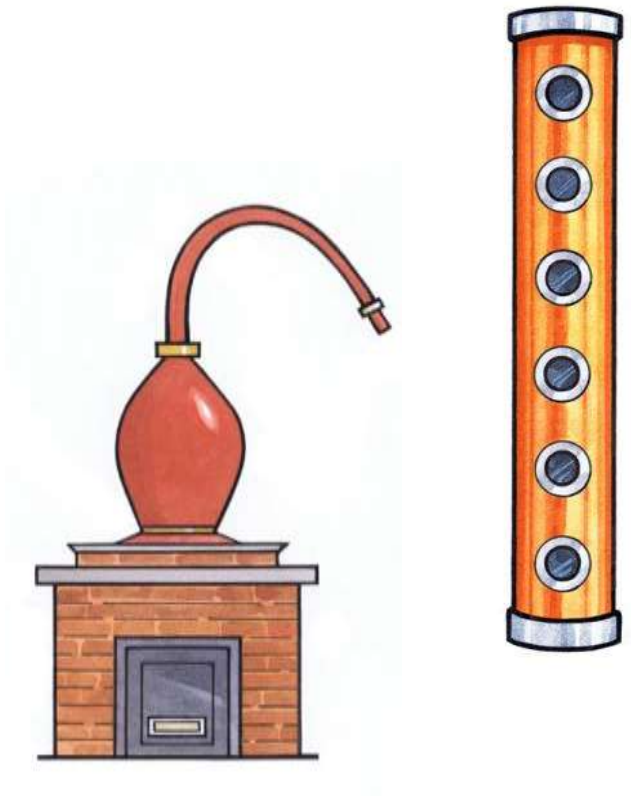
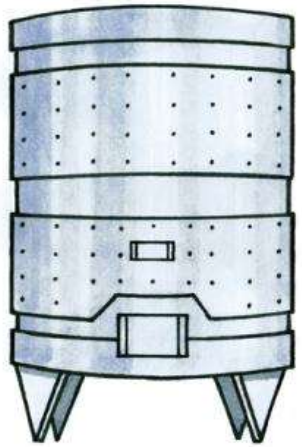
Post-distillation operations

caramel colour, sugar, blending and dilution



pot stills or column stills

❸ ❹



oak vessels or inert vessels

caramel colour (*optional*)

blending and dilution (*typical*)

sugar (*optional*)

fruit spirit

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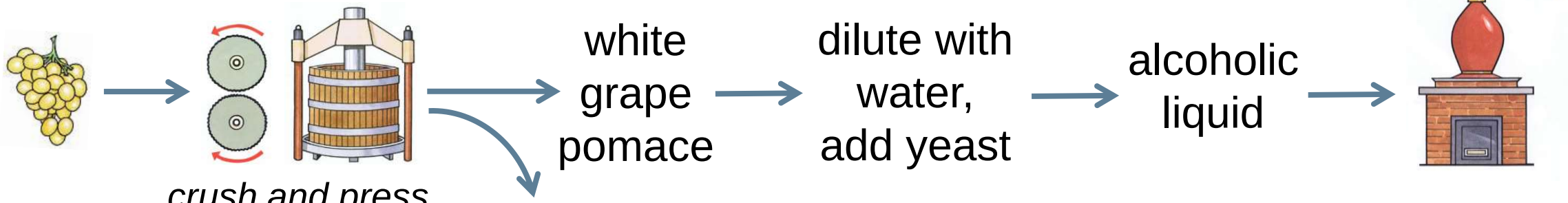
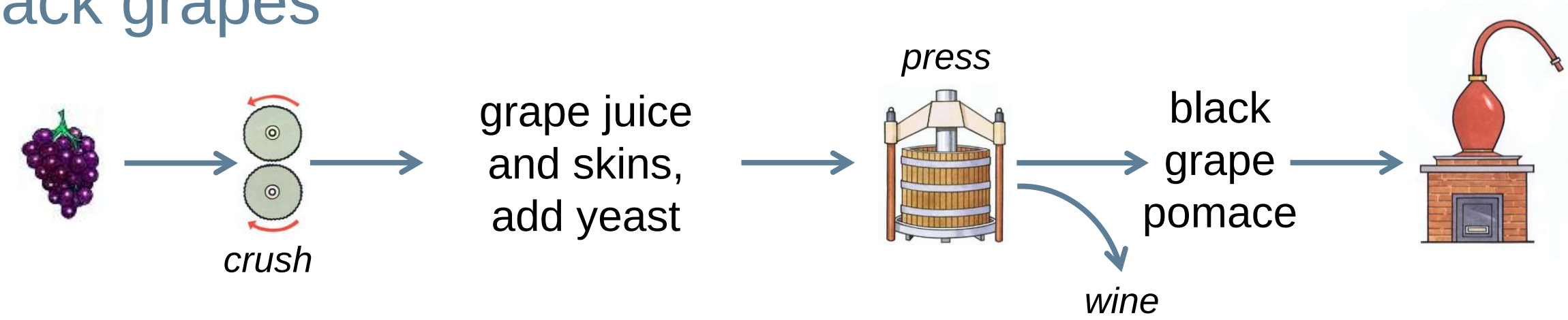
Fruit spirits basics

processing pomace

White grapes



Black grapes



France

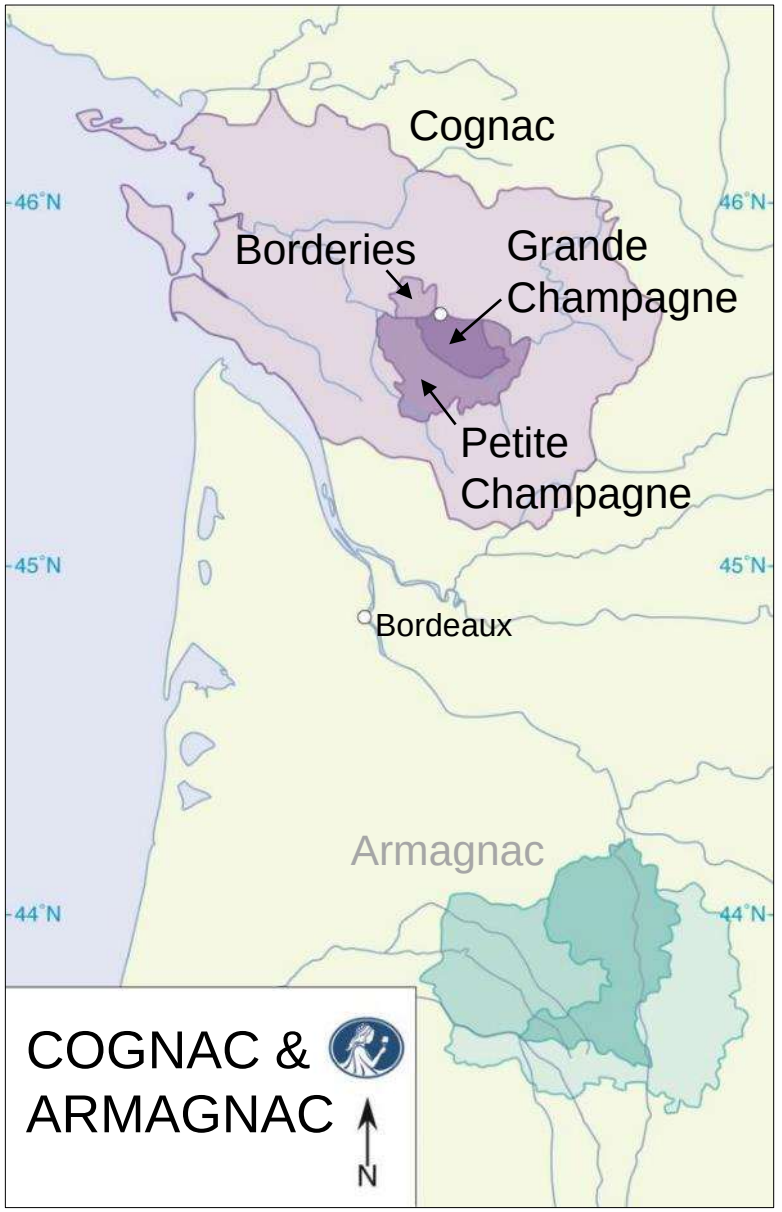
FRENCH FRUIT SPIRIT REGIONS
N
50°N
50°N
Calvados
Paris
46°N
46°N
Cognac
Bordeaux
Armagnac
42°N
42°N

Cognac

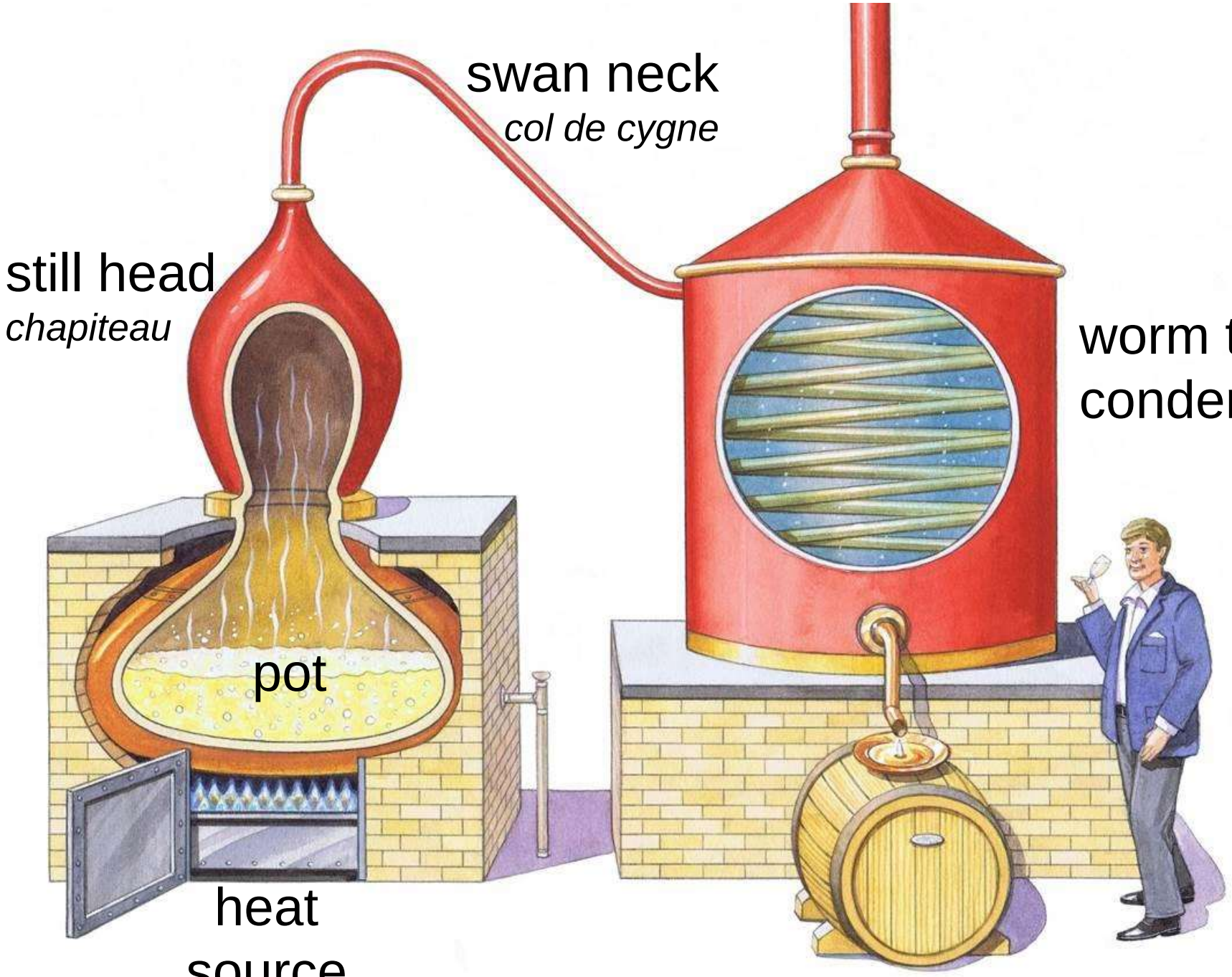
Grapes

- must be grown in a specific area
- Ugni Blanc
- notable sub-regions

Grande Champagne
Petite Champagne } Fine Champagne
Borderies



Cognac



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Cognac

Distillation

- double pot still distillation

  directly heated with flames, worm tub condenser

Maturation

- minimum of 2 years in oak barrels

Finishing

- blending options

  different sub-regions, oak management, age

- add sweetness, caramel colour

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Cognac labelling terms

VS
2 years

VSOP
4 years

XO, *Hors d'âge*
10 years

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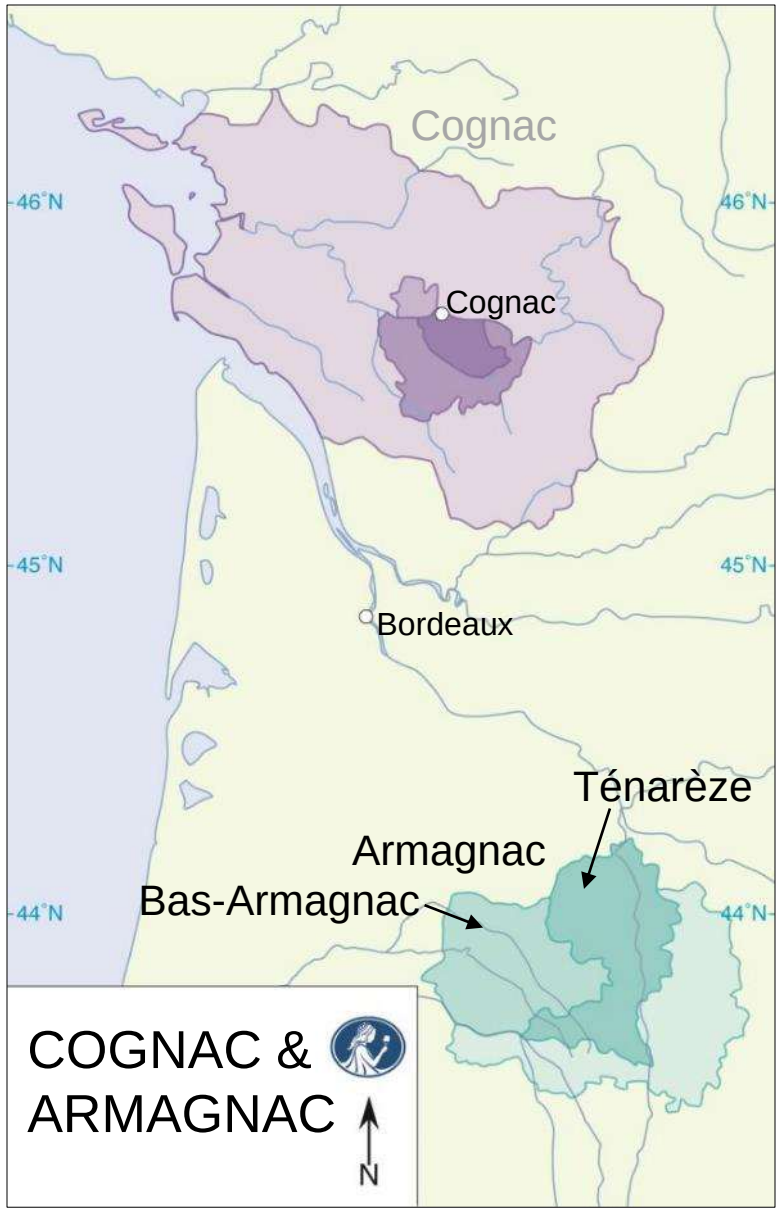
Armagnac



Grapes

- must be grown in specific area
- Ugni Blanc
- Baco Blanc
- Folle Blanche
- notable sub-regions

    Bas-Armagnac

    Ténarèze

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Armagnac

Distillation

- majority in short continuous column
- double pot distillation rare

Maturation

- minimum 3 months in inert vessels
- minimum of 1 year in oak barrels

Finishing

- similar to Cognac

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Armagnac labelling terms

Blanche
3 months

VS
1 year

VSOP
4 years

XO, *Hors d'âge*, Vintage
10 years

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APPEARANCE		
Clarity		clear – hazy
Intensity		water-white – pale – medium – deep – opaque
Colour		colourless – lemon – gold – amber – brown pink – red – orange – yellow – green – blue – purple – brown – black
Other observations		e.g. louching
NOSE		
Condition		clean – unclean
Intensity		neutral – light – medium – pronounced
Aroma characteristics		e.g. raw material, processing, oak and maturation
PALATE		
Sweetness (sugar level)		dry – off-dry – medium – sweet
Texture		e.g. rough, smooth, watery, mouthfilling, warming
Flavour intensity		neutral – light – medium – pronounced
Flavour characteristics		e.g. raw material, processing, oak and maturation
Finish	length	short – medium – long
	nature	neutral – simple – some complexity – very complex
CONCLUSIONS		
Quality level		faulty – poor – acceptable – good – very good – outstanding

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Calvados

Apples & pears

- must be grown in specific area

Distillation

- pot stills (like Cognac)
- short column stills (like Armagnac)

Maturation

- large old oak vessels

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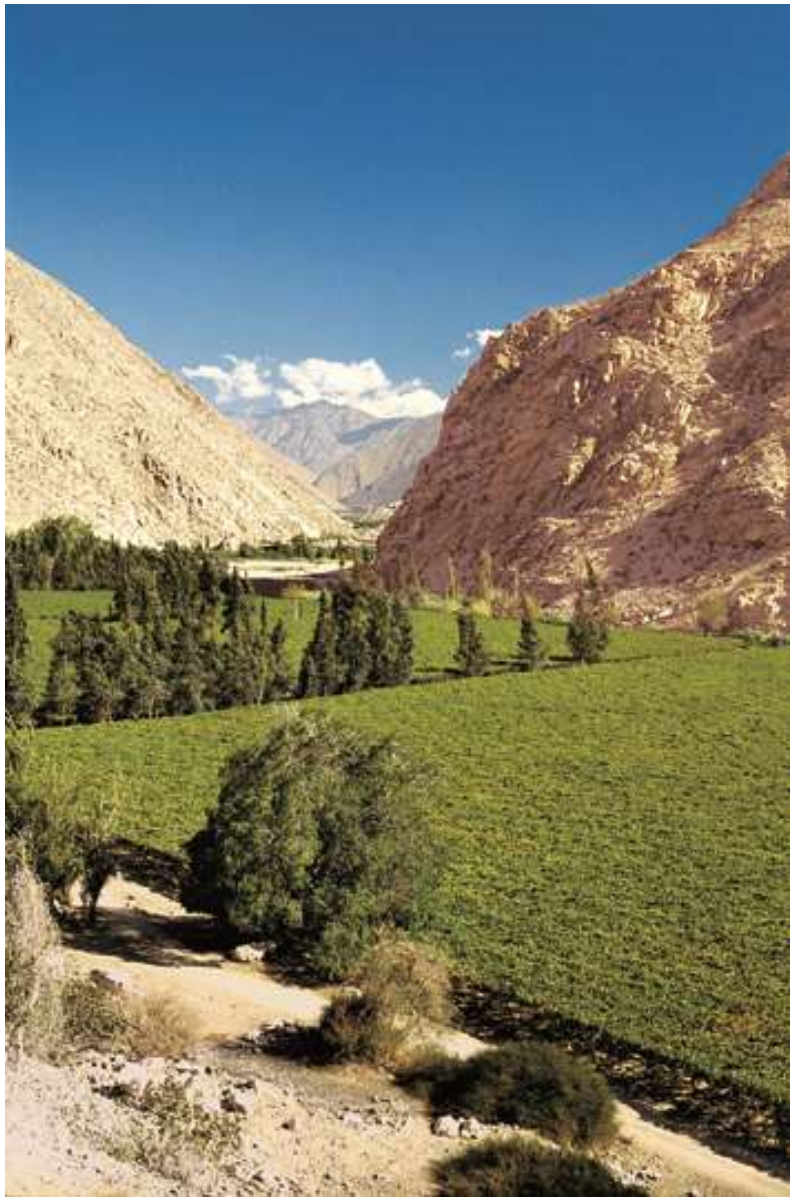
Pisco



Countries of origin

- Chile
- Peru

Grapes

- various aromatic grape varieties

Maturation

- typically unaged

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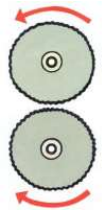
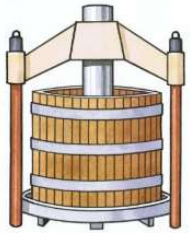
Processing pomace

White grapes





crush and press

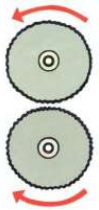
white grape pomace

grape juice

dilute with water, add yeast

alcoholic liquid

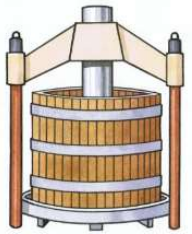
Black grapes



crush

grape juice and skins, add yeast

press



black grape pomace

wine

Grappa

Country of origin

- Italy

Pomace

- white or black grape pomace
- specific grape varieties

Maturation

- unaged
- aged in inert vessels or wood barrels

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